IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

SHIMADA et al | Atty. Ref.: 829-620; Confirmation No. 1391

Appl. No. 10/771,263 | TC/A.U. 1391

Filed: February 4, 2004 | Examiner: Chowdhury, T. R.

For: Transmission Type Liquid Crystal Display Having A Transparent Colorless Organic Interlayer Insulating Film Between Pixel Electrodes and Switching

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July 6, 2007

MAIL STOP REISSUE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

STATEMENT UNDER 37 CFR §41.202(a)

In accordance with 37 CFR §41.202(a), and responsive to the Official Action dated February 6, 2007, Applicants provide the information on the attached sheets.

(1) IDENTIFICATION OF INTERFERING APPLICATION:

Applicants seek an interference with claims of United States Patent 6,515,300 to den Boer et al., issued February 4, 2003.

(2)(a) IDENTIFICATION OF INTERFERING CLAIMS:

The interfering claims are claims 1 – 13 of United States Patent 6,515,300 to den Boer et al. and claims 34 – 60 of Applicants' application 10/771,263.

(2)(b) PROPOSED COUNT:

A liquid crystal display device comprising:

a substrate;

an array of transistors on said substrate;

a plurality of gate and data lines connected to said transistors;

an array of pixel electrodes on said substrate;

a plurality of pixel electrodes overlapping at least one of the gate and data lines; and

a photo-imageable insulating layer on said substrate between said gate and data lines and said pixel electrodes at least in the areas of overlap and areas adjacent pixel electrode-connected electrodes of the transistors;

wherein said photo-imageable insulating layer has a dielectric constant less than about 5.0, and a first group of contact vias defined therein by photo-imaging, wherein said pixel electrodes are in electrical communication with corresponding transistor electrodes through corresponding contact vias of said first group that are defined in said insulating layer.

(2)(c) CORRESPONDENCE OF CLAIMS TO PROPOSED COUNT:

(2)(c)(1): CLAIM 1 OF US PATENT 6,515,300 TO DEN BOER ET AL.

Claim 1 of United States Patent 6,515,300 to den Boer et al. is identical to the Proposed Count with the following two exceptions: (1) in the penultimate paragraph of the Proposed Count the photo-imageable insulating layer is said to be on said substrate on areas adjacent "pixel electrode-connected electrodes" of the transistors, rather than on areas adjacent "source" electrodes of the transistors; and (2) the last paragraph of the proposed count does not include the adjective "source" to modify "electrodes." Thus, the electrodes referenced in the last two paragraphs of the proposed count are more broadly described than "transistor source electrodes."

The narrower verbiage of United States Patent 6,515,300 to den Boer et al. arises from the fact that the den Boer specification describes the pixel electrode as being connected to the source electrode of the TFT and the address line as being connected to the drain electrode of the TFT. Applicants' disclosure adopts the converse by connecting a source electrode of the TFT to the source line and connecting the pixel electrode to the drain electrode of the TFT.

It is known in the art that the electrodes of switching devices for an LCD can be connected either in a pixel-to-source electrode manner (as in den Boer) or in the pixel-to-drain electrode manner. For example, US Patent 5,652,667 to Kurogane states that either source or drain of switching element 1 is connected to both a pixel electrode 2 and a storage capacitor 3 (*see*, e.g., col. 1, lines 48 – 50). US Patent 5,610,738 to Sasano et al. teaches that the source and drain of a TFT of a pixel of an LCD display are intrinsically determined in dependence upon the bias polarity, and that the source and drain can be interchanged during the operation (*see*, e.g., col. 5, lines 41+). From US Patent 5,701,167 to Yamazaki it is also understood that either the source or drain of a TFT can be connected to the pixel electrode of an LCD, as evidence by independent claim 1 which refers to "a plurality of pixel electrodes …, each of said pixel electrodes being connected to corresponding one of said thin film transistors *at one of source and drain thereof*

(emphasis added).

Accordingly, the fact that independent claim 1 of US Patent 6,515,300 to den Boer et al. specifies that it is a source electrode of a TFT that is the particular TFT electrode which is connected to the pixel electrode does not impart any patentable distinctiveness to independent claim 1 of US Patent 6,515,300 to den Boer et al. Therefore, independent claim 1 of United States Patent 6,515,300 to den Boer et al. corresponds to the Proposed Count.

(2)(c)(2): APPLICANTS' INDEPENDENT CLAIM 34

Applicants' amended independent claim 34 is identical to the Proposed Count with three exceptions. A first exception is that Applicants' independent claim 34 employs the phrase "photosensitive resin" rather than "photo-imageable insulating layer." A second exception is that, as a concluding phrase, independent claim 34 employs the verbiage of "contact vias of said first group that are defined in said *photosensitive resin*" rather than "contact vias of said first group that are defined in said *insulating layer*". A third exception is that the dielectric constant of Applicants' independent claim 34 is "of about 3.4 – 3.5" instead of "less than about 5.0." None of these exceptions prevents independent claim 34 from corresponding to the Proposed Count.

Use of the phrase "photosensitive resin" rather than "photo-imageable insulating layer" does not constitute a patentable difference between Applicants' amended independent claim 34 and the Proposed Count. It is understood in the semiconductor arts that use of a photosensitive resin can be and likely is for photo imaging. In this regard, *see* US Patent 5,642,211 to Okano, in which use of a photo-sensitive resin for insulating layer 9 under a pixel electrode of an LCD is manifestly for photographic exposure (see, e.g., col. 7, lines 36 – 39). In particular, Okano states that "After the formation of the insulating layer 9, the through hole 9a is formed in the insulating layer 9 as shown in FIG. 4C. The through hole 9a is formed by using a photographic method including exposure with a photo-mask and development" (*see*, e.g., col. 4, lines 1 – 10). See also US Patent 5,501,900 to Harada et al., wherein a "photo-sensitive" resist layer 6 (including a resin) is formed on substrate 13, and is later "light-exposed" through a

photomask 9. The photo-sensitive resist layer 6 is developed and dried after light exposure, so that a relief image (resin pattern including catalyst) 7, which has a pattern for a black matrix, is obtained. *See*, e.g., col. 7, lines 32+ of US Patent 5,501,900 to Harada et al.

Conversely, it is readily understood by (for example) US Patent 6,515,300 itself that a property of a photo-imageable material is its photosensitivity. See, for example, col. 6, lines 54+, which describe how layer 33 acts as a "negative resist so that UV exposed areas remain on the substrate and areas of layer 33 unexposed to UV during photo-imaging are removed during developing". Moreover, it would be understood by the person skilled in the art that an insulation material could be used for such a photosensitive resin positioned between conductive lines and a pixel electrode, since it is well known in the prior art to employ an insulation material between conductive lines and a pixel electrode. *See*, e.g., col. 2, line 29 – col. 3, line 8 of United States Patent 6,515,300 to den Boer et al. and the patents cited therein.

Given the lack of patentable significance between the two phrases "photosensitive resin" and "photo-imageable insulating layer", the use by independent claim 34 of the words "*photosensitive resin*" (rather than the words "insulating layer" of the Proposed Count) as its last two words is consistent with the correspondence of independent claim 34 to the Proposed Count.

A dielectric range "of about 3.4 – 3.5" as set forth in Applicants' independent claim 34 instead of "less than about 5.0" as set forth in the Proposed Count does not constitute a patentable difference. "In the case where the claimed ranges 'overlap or lie inside ranges disclosed by the prior art' a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990)." MPEP §2144.05. Therefore, Applicants' narrower dielectric range "of about 3.4 – 3.5" has no patentable distinctiveness.

Since none of the wording exceptions of Applicants' independent claim 34 imparts patentable distinctiveness, independent claim 34 corresponds to the Proposed Count.

(2)(c)(3): APPLICANTS' INDEPENDENT CLAIM 43

Applicants' independent claim 43 is identical to the Proposed Count with two exceptions. A first exception is that Applicants' independent claim 43 states that the photo-imageable insulating layer is "in areas adjacent transistor electrodes which are in electrical communication with the pixel electrodes", rather than "in areas adjacent source electrodes of the transistors". A second exception is that the dielectric constant of Applicants' independent claim 34 is "of about 3.4 – 3.8" instead of "less than about 5.0." Neither of these exceptions prevents independent claim 43 from corresponding to the Proposed Count.

The fact that Applicants' independent claim 43 describes the photo-imageable insulating layer as being "in areas adjacent transistor electrodes which are in electrical communication with the pixel electrodes", rather than "in areas adjacent source electrodes of the transistors", does not constitute a patentable difference between Applicants' amended independent claim 43 and the Proposed Count. While Applicants' independent claim 43 is more broadly worded in not specifying whether the transistor electrode which communicates with the pixel electrode is a source or drain electrode, the increased breadth of independent claim 43 imparts no patentable merit above that of the Proposed Count since, as explained in section 2(C)(1) above, the electrodes of switching devices for an LCD can be connected either in a pixel-to-source electrode manner (as in den Boer) or in the pixel-to-drain electrode manner.

A dielectric range "of about 3.4 – 3.8" as set forth in Applicants' independent claim 34 instead of "less than about 5.0" as set forth in the Proposed Count does not constitute a patentable difference for essentially the same reasons as set forth in the preceding section (2)(c)(2).

Since neither wording exception of Applicants' independent claim 43 imparts patentable distinctiveness, independent claim 34 corresponds to the Proposed Count.

(2)(c)(4): APPLICANTS' NEW INDEPENDENT CLAIM 52

Applicants' new independent claim 52 is a method analogue of independent claim 43. The first act (1) of independent claim 52 corresponds to the first two structural limitations of the Proposed Count (i.e., the substrate and the gate and data lines). The second act (2) of independent claim 52 corresponds to formation of the photo-imageable layer. While act (2) mentions that the photo-imageable insulating layer is provided on said substrate *over* said gate and data lines, the last paragraph of new independent claim 52 states that the photo-imageable insulating layer is provided *between* said gate and data lines and the pixel electrodes at least in areas of overlap between said gate and data lines and said pixel electrodes, so that all limitations of the sixth paragraph of the Proposed Count are included in new independent claim 52. Act (2) of independent claim 52 also specifies the dielectric constant in a range of the photo-imageable insulating layer. Acts (3) and (4) of new independent claim 52 express the formation of the contact vias described in the last paragraph of the Proposed Count.

Other than in its method expression of the same subject matter, Applicants' new independent claim 52 is substantially identical to the Proposed Count with the same two subject matter exceptions as independent claim 43. A first exception is that Applicants' independent claim 52 describes the photo-imageable insulating layer as being "in areas adjacent transistor electrodes which are in electrical communication with the pixel electrodes", rather than "in areas adjacent source electrodes of the transistors. While Applicants' independent claim 52 is more broadly worded in not specifying whether the transistor electrode which communicates with the pixel electrode is a source or drain electrode, the increased breadth of independent claim 52 imparts no patentable merit above that of the Proposed Count since, as explained in section 2(C)(1) above, the electrodes of switching devices for an LCD can be connected either in a pixel-to-source electrode manner (as in den Boer) or in the pixel-to-drain electrode manner.

A second exception is that the dielectric constant of Applicants' independent claim 34 is "of about 3.4 – 3.8" instead of "less than about 5.0." This second exception does not prevent independent claim 52 from corresponding to the Proposed Count, for the same reasons as explained in preceding section (2)(c)(3).

(2)(c)(5): APPLICANT'S DEPENDENT CLAIMS 35, 44, 53 AND DEN BOER'S DEPENDENT CLAIM 2

These dependent claims pertain to the photosensitive resin being planarized adjacent the pixel electrode. There are many teachings in the prior art already of record of pixel electrode being formed on a planar or flattened layer. See, for example, JP 4-335617 wherein inter-layer insulation layer 10 is shown (e.g., in Fig. 7) as being flat. Flattenness of a comparable layer under a pixel electrode is also espoused in JP 6-242433 and JP-7-333634. These dependent claims do not patentably define over and therefore correspond to the Proposed Count.

(2)(c)(6): APPLICANT'S DEPENDENT CLAIMS 36, 45, 54 AND DEN BOER'S DEPENDENT CLAIM 3

These dependent claims pertain to a pixel aperture ratio being at least about 65%. The motivation for having sufficient pixel aperture ratio is replete in prior art combineable with the Proposed Count. *See*, e.g., US Patent 5,708,483 to Asai, wherein in one embodiment the pixel aperture ratio was found to be 70% (see col. 6, lines 54+). *See* also US Patent 5003356 to Wakai et al, also having a pixel aperture ratio of 70%. These dependent claims do not patentably define over and therefore correspond to the Proposed Count.

(2)(c)(7): APPLICANT'S DEPENDENT CLAIMS 37, 46, 55 AND DEN BOER'S DEPENDENT CLAIM 4

These dependent claims pertain to the pixel electrode overlaps one of the data and gate lines (by about 1 μm or more in Applicants' claims, by about 3 μm in den Boer's claim). Such overlap is known in the prior, such as in US Patent 5,003,356 to Wakai et al (combineable with the Proposed Count), wherein pixel electrodes are formed, each overlapping the corresponding gate line and the corresponding drain line. *See*, e.g., the paragraph bridging columns 6 and 7. These dependent claims do not patentably define over and therefore correspond to the Proposed Count.

(2)(c)(8): APPLICANT'S DEPENDENT CLAIMS 38, 47, 56 AND DEN BOER'S DEPENDENT CLAIM 6

These dependent claims pertain to a semiconductor layer on top of the gate insulating layer. Prior art combineable with the Proposed Count is replete with teachings of semiconductor layers on a gate electrode. For example, US Patent 5,032,883 to Wakai et al. teaches a gate insulating film formed on at least the gate electrode, a semiconductor film formed at a position on the gate insulating film corresponding to the gate electrode, source and drain electrodes arranged on the semiconductor film so as to form a channel portion, a transparent insulating film covering the source and drain electrodes and the semiconductor film, and a transparent electrode connected to the source electrode. Thus, claims 38, 47, and 56 claims do not patentably define over and therefore correspond to the Proposed Count.

(2)(c)(9): APPLICANT'S DEPENDENT CLAIMS 39, 48, 57 AND DEN BOER'S DEPENDENT CLAIM 7

These dependent claims require that the semiconductor layer include intrinsic a-Si. US Patent 5,032,883 to Wakai et al., combineable with the Proposed Count, teaches a semiconductor film 104 formed at a position on the gate insulating film, with the semiconductor film 104 consisting of amorphous silicon (see col. 4, lines 35+). It is known to form a semiconductor layer comprising intrinsic a-Si at this and other positions. These dependent claims do not patentably define over and therefore correspond to the Proposed Count.

(2)(c)(10): APPLICANT'S DEPENDENT CLAIMS 40, 49, 58 AND DEN BOER'S DEPENDENT CLAIM 9

These dependent claims require a contact layer over the semiconductor layer. Prior art combineable with the Proposed Count teaches a contact layer over a semiconductor layer which in turn covers a gate insulating layer. For example, US Patent 5,032,883 to Wakai et al. shows drain and source electrodes 106 and 107 are formed on

semiconductor film 104, with electrodes 106 and 107 respectively being constituted by contact films 106a and 107a each consisting of amorphous silicon. *See*, e.g., col. 4, lines 39 – 51. Therefore, these dependent claims do not patentably define over and therefore correspond to the Proposed Count.

(2)(c)(11): APPLICANT'S DEPENDENT CLAIMS 41, 50, 59 AND DEN BOER'S DEPENDENT CLAIM 10

These dependent claims require that the contact layer include amorphous silicon. Prior art combineable with the Proposed Count teaches such a contact layer including amorphous silicon. For example, US Patent 5,032,883 to Wakai et al. shows drain and source electrodes 106 and 107 are formed on semiconductor film 104, with electrodes 106 and 107 respectively being constituted by contact films 106a and 107a each consisting of amorphous silicon. *See*, e.g., col. 4, lines 39 – 51. These dependent claims do not patentably define over and therefore correspond to the Proposed Count.

(2)(c)(12): APPLICANT'S DEPENDENT CLAIMS 42, 51, 60 AND DEN BOER'S DEPENDENT CLAIM 12

These dependent claims pertain to the thickness of the pixel electrodes. Applicants' claims require that the thickness of the pixel electrodes be no greater than 1500 Å. Den Boer's dependent claim 12 requires that the thickness of the pixel electrodes be about 1400 Å. These thicknesses are obvious in view of pixel electrode thicknesses taught in combineable prior art. For example, US Patent 5,032,883 to Wakai et al. shows transparent electrode 110 consisting of ITO and having a thickness of about 1,000 Å formed on the upper surface of insulating film 108. *See*, e.g., col. 4, lines 64 – 66. These dependent claims do not patentably define over and therefore correspond to the Proposed Count.

(2)(c)(13): DEN BOER'S DEPENDENT CLAIM 5

This dependent claim requires that the thickness of the gate electrodes and the gate lines be about 2500 Å Thickness of the gate structure is a matter of design choice. Combineable prior art teaches TFT gate structure in a range which includes 2500 Å, e.g., from 0.1 μm to 0.3 μm. See, for example, col. 2, lines 48 – 52 of US Patent 5,070,379 to Nomoto et al. This dependent claim does not patentably define over and therefore corresponds to the Proposed Count.

(2)(c)(14): DEN BOER'S DEPENDENT CLAIM 8

This dependent claim requires that the thickness of the semiconductor layer be about 2000 Å US Patent 5,032,883 to Wakai et al. teaches a semiconductor film 104 formed at a position on the gate insulating film, with a thickness of semiconductor film 104 being about 1000 Å. Slight variations of this film of about 1000 Å is obvious. Therefore, this dependent claim does not patentably define over and therefore corresponds to the Proposed Count.

(2)(c)(15): DEN BOER'S DEPENDENT CLAIM 11

This dependent claim requires that the thickness of the contact layer be about 500 Å Prior art combineable with the Proposed Count teaches a contact layer of 500 Å. For example, US Patent 5,032,883 to Wakai et al. shows drain and source electrodes 106 and 107 are formed on semiconductor film 104, with electrodes 106 and 107 respectively being constituted by contact films 106a and 107a each consisting of amorphous silicon and having a thickness of about 500 Å. *See*, e.g., col. 4, lines 39 – 51. This dependent claim does not patentably define over and therefore corresponds to the Proposed Count.

(2)(c)(16): DEN BOER'S DEPENDENT CLAIM 13

This dependent claim requires a pixel pitch of about 150 μm. Prior art combineable with the Proposed Count teaches a pixel pitch range which includes 150 μm.

See, for example, col. 2, lines 25 – 32 of US Patent 5,365,355 to Hastings et al. which teaches a pixel pitch range of from 30 μm to 300 μm. Also see col. 3, lines 58 – 61 of US Patent 5,482,896 to Tang. This dependent claim does not patentably define over and therefore corresponds to the Proposed Count.

(3)(a) CLAIM CHART COMPARISON:

The following chart compares independent claim 1 of United States Patent 6,515,300 to den Boer et al. with Applicants' independent claim 34.

Claim 1: USP 6,515,300 to den Boer et al.	Claim 34 Applicants' US Patent 6,433,851
A liquid crystal display device comprising:	A liquid crystal display device comprising:
a substrate;	a substrate;
an array of transistors on said substrate;	an array of transistors on said substrate;
a plurality of gate and data lines connected to said transistors;	a plurality of gate and data lines connected to said transistors;
an array of pixel electrodes on said substrate;	an array of pixel electrodes on said substrate;
a plurality of pixel electrodes overlapping at least one of the gate and data lines; and	a plurality of pixel electrodes overlapping at least one of the gate and data lines; and
a photo-imageable insulating layer on said substrate between said gate and data lines and said pixel electrodes at least in the areas of overlap and areas adjacent source electrodes of the transistors;	a photosensitive resin on said substrate between said gate and data lines and said pixel electrodes at least in the areas of overlap and areas adjacent pixel electrode-connected electrodes of the transistors;

wherein said photo-imageable insulating layer has a dielectric constant less than about 5.0, and a first group of contact vias defined therein by photo-imaging,	wherein said photosensitive resin has a dielectric constant of about 3.4 to - 3.5, and a first group of contact vias defined therein by photo-imaging,
wherein said pixel electrodes are in electrical communication with corresponding transistor source electrodes through corresponding contact vias of said first group that are defined in said insulating layer.	wherein said pixel electrodes are in electrical communication with corresponding transistor electrodes through corresponding contact vias of said first group that are defined in said photosensitive resin.

(3)(b) STATEMENT UNDER 37 CFR §41.203(a) :

Applicants' independent claim 34 and independent claim 1 of United States Patent 6,515,300 to den Boer et. are substantially the same (as explained below, they differ in wording in essentially three minor respects. None of the wording differences amount to patentable distinction).

If independent claim 1 of US Patent 6,515,300 to den Boer et al were considered to be prior art, Applicants' independent claim 34 would be rendered obvious because the few wording differences between the claims afford no patentable distinction to Applicants' independent claim 34.

Applicants' independent claim 34 differs from independent claim 1 of United States Patent 6,515,300 to den Boer et al. essentially in three aspects.

First, Applicants' independent claim 34 employs the phrase "photosensitive resin" rather than "photo-imageable insulating layer**".** Section 2(C)(2) above (incorporated by reference at this juncture) explains the lack of patentable significance between the two phrases "photosensitive resin" and "photo-imageable insulating layer".

Second, Applicants' independent claim 34 recites a dielectric range "of about 3.4 – 3.5" instead of "less than about 5.0". "A prior art reference that discloses a range encompassing a somewhat narrower claimed range is sufficient to establish a prima facie case of obviousness. In re Peterson, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003)". MPEP § 2144.05. As explained in section 2(C)(2) above (incorporated by reference at this juncture), a dielectric range "of about 3.4 – 3.5" (as set forth in Applicants' independent claim 34) instead of "less than about 5.0" (as set forth in independent claim 1 of United States Patent 6,515,300 to den Boer et al.) does not constitute a patentable difference.

Third, Applicants' independent claim 34 refers to "pixel electrode-connected electrodes of the transistors" rather than "transistor source electrodes". As explained in section 2(C)(1) above (incorporated by reference at this juncture), it is known in the art that the electrodes of switching devices for an LCD can be connected either in a pixel-to-source electrode manner (as in den Boer) or in the pixel-to-drain electrode manner. Therefore, the broader terminology of Applicants' independent claim 34 describing the electrode of the TFT which is connected to the pixel electrode would be obvious in view of den Boer's connection of a source electrode of the TFT to the pixel electrode.

Conversely, if Applicants' independent claim 43 were considered to be prior art, independent claim 1 of US Patent 6,515,300 to den Boer et al would be rendered obvious because the few wording differences between the claims afford no patentable distinction to independent claim 1 of US Patent 6,515,300 to den Boer et al.

Independent claim 1 of United States Patent 6,515,300 to den Boer et al. differs from Applicants' independent claim 43 in essentially in three aspects. None of the wording differences constitute a patentable distinction, for reasons which follow from those just provided.

First, independent claim 1 of United States Patent 6,515,300 to den Boer et al. employs the phrase "photo-imageable insulating layer" rather than Applicants' phrase "photosensitive resin". Section 2(C)(2) above (incorporated by reference at this juncture)

explains the lack of patentable significance between the two phrases "photosensitive resin" and "photo-imageable insulating layer".

Second, independent claim 1 of United States Patent 6,515,300 to den Boer et al. recites a dielectric range of "less than about 5.0", whereas Applicants' independent claim 34 recites a narrower range of about 3.4 – 3.5". "In the case where the claimed ranges '*overlap* or lie inside ranges disclosed by the prior art' a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990)." MPEP §2144.05 (emphasis added). As explained in section 2(C)(2) above (incorporated by reference at this juncture), a dielectric range of "less than about 5.0", which encompasses Applicants' range "of about 3.4 – 3.5", does not constitute a patentable difference.

Third, independent claim 1 of United States Patent 6,515,300 to den Boer et al. refers to "transistor source electrodes" rather than "pixel electrode-connected electrodes of the transistors". Since "transistor source electrodes" are a subset of the two types of transistor electrodes that can be connected to a pixel electrode, it would be obvious to connect a source electrode of a TFT to a pixel electrode, as was previously done in the art as explained in section 2(C)(1) above. Therefore, the narrower terminology of independent claim 1 of United States Patent 6,515,300 to den Boer et al. describing the source electrode of the TFT as being connected to the pixel electrode would be obvious in view of Applicants' independent claim 34.

Accordingly, Applicants have demonstrated that independent claim 1 of United States Patent 6,515,300 to den Boer et al. and Applicants' independent claim 34 interfere within the meaning of 37 CFR §41.203(a).

(4) EXPLANATION WHY APPLICANT WILL PREVAIL ON PRIORITY

Applicants believe they will prevail on priority because Applicants' will at least be accorded an earlier priority date. Insofar as filing dates are concerned, United States Patent 6,515,300 to den Boer et al. will be confined to an April 12, 1996 continuation-in-part (CIP) filing date. Applicants, on the other hand, are entitled to and believe they will be accorded benefit of their priority documents JP 7-206367 and JP 7-254043, filed August 11, 1995 and September 29, 1995, respectively, both of which pre-date the den Boer CIP April 12, 1996 filing date.

1. den BOER IS CONFINED TO AN APRIL 12, 1996 FILING DATE

United States Patent 6,515,300 to den Boer et al. is confined to an April 12, 1996 filing date because the pre-CIP den Boer parent application 09/470,271, filed June 6, 1995, lacks features such as the photosensitivity and dielectric constant range included in the Proposed Count. The following rationale for such confinement also appears in an amendment filed on even date herewith (which is incorporated by reference).

Both the den Boer parent application SN 09/470,271 and US Patent 6,376,270 to Gu et al. fail to teach or suggest several significant aspects of the claimed subject matter. In terms of claimed subject matter, among other things the den Boer parent application SN 09/470,271 and Gu:

(1) do *not* describe its "substantially transparent planarization or insulating layer 33" as a photosensitive resin or photo-imageable layer.

(2) describe the dielectric constant of its "substantially transparent planarization or insulating layer 33 as having a low dielectric constant (less than about ***3***.0)" [emphasis added, see page 20, lines 7+, as well as page 12, line 16; page 14, line 9; of SN 09/470,271]. In fact, in discussing a prior art reference, the den Boer parent SN 09/470,271 alleged that the dielectric constant of SiO_2 of about 3.9 was undesirably high

and thereby caused capacitance C_{PL} to be too high [see page 10, lines 1+ of SN 09/470,271].

The fact is that, compared to U.S. Patent 6,372,534 to den Boer[1], both den Boer parent application SN 09/470,271 and US Patent 6,376,270 to Gu et al. conspicuously omits the "photosensitive resin" and any teaching of a dielectric constant above 3.0.

In the above regard, regarding the lack of mention of "photosensitive resin" and the dielectric constant in US Patent 6,376,270, the next page of this document shows a side-by-side comparison of col. 6, lines 23 through col. 6, line 45 of U.S. Patent 6,372,534 to den Boer with the corresponding paragraph in US Patent 6,376,270. In the comparison, example text found in U.S. Patent 6,372,534 to den Boer but *not* found in US Patent 6,376,270 is *italicized*. On the other hand, some of the salient text of US Patent 6,376,270 not included in U.S. Patent 6,372,534 to den Boer (which shows a narrower range of dielectric constant) is underlined. The comparison on the next page is only one instance that emphasizes the deficiencies of US Patent 6,376,270 with respect to the claimed subject matter.

Further, mere mention by US Patent 6,376,270 to Gu et al. or den Boer parent application SN 09/470,271 of Benzocyclobutene (BCB) does *not* provide a basis for rejecting Applicants' reissue claims. In fact, Gu expressly refutes any notion that BCB is inherently photo-imageable.

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[1] The deficiencies of U.S. Patent 6,372,534 to den Boer are shared by other den Boer CIP applications which branched off the den Boer parent application SN 09/470,271, including U.S. Patent 6,372,534 to den Boer, as explained in an April 17, 2007 Request for Reconsideration filed in companion reissue application 10/915,717.

U.S. Patent 6,372,534

Substantially transparent insulating layer 33 having a dielectric constant less than about 5.0 is deposited as a sheet on substrate 19 so as to cover TFTs 9 and address lines 5 and 7. *Layer 33 is formed of a photo-imageable material such as Fuji Clear.TM. or a photo-imageable type of BCB.* Insulating layer 33 is continuous in the viewing area of the display except for vias or contact holes 35 and 36 formed therein to allow pixel electrodes 3 to contact corresponding TFT source electrodes and the storage capacitor electrodes respectively (i.e. each pixel includes two vias (35 and 36) in insulating layer 33--one for the source electrode and the other for the storage capacitor).

Layer 33 has a dielectric constant .epsilon. *less than or equal to about 5.0* according to certain embodiments of this invention. In certain preferred embodiments, layer 33 has a dielectric constant of about 2.7 and is made of a *photo-imageable* type of Benzocyclobutene (BCB), an organic material available from Dow Chemical, for the purpose of reducing capacitive cross-talk (or capacitive coupling) between pixel electrodes 3 and the address lines in overlap areas 18. Layer 33 has a low dielectric constant and/or a relatively large thickness for the specific purpose of reducing C_{PL} in overlap areas 18.

US Patent 6,376,270

Substantially transparent planarization or insulating layer 33 having a low dielectric constant (less than about 3.0) is deposited on substrate 19 so as to cover TFTs 9 and address lines 5 and 7. Layer 33 is continuous in the viewing area of the display except for vias formed to allow pixel electrodes 3 to contact the TFT source electrodes and the storage capacitor electrodes. Planarization layer 33 has a dielectric constant ε less than or equal to about 3.0 according to certain embodiments of this invention. In more preferred embodiments, layer 33 has a dielectric constant of about 2.7 and is made of Benzocyclobutene (BCB) for the purpose of reducing capacitive cross-talk (or capacitive coupling) between pixel electrodes 3 and the address lines in overlap areas 18. In other words, layer 33 has a low dielectric constant (e.g. 2.7) and relatively large thickness for the specific purpose of reducing C_{PL} in overlap areas 18. BCB (an organic material) is produced and is commercially available from Dow Chemical. Other known substantially transparent planarization layers used in the semiconductor and MCM industries may also be used as layer 33 according to alternative embodiments of this invention.

In U.S. Patent 6,372,534 and its contemporaries (but not its parent), Gu persistently refers to a *photo-imageable* type of Benzocyclobutene (BCB). *See*, e.g., the passages cited in the foregoing claim chart. By so conspicuously employing the modifier phrase "*photo-imageable* type", Gu admits that BCB can also be non photo-imageable.

What is admitted by Gu in U.S. Patent 6,372,534 and elsewhere is expressly confirmed by Gu in US Patent 6,011,274:

Substantially transparent insulating layer 33 having a dielectric constant less than about 5.0 (preferably less than about 4.0 and most preferably less than about 3.0) is deposited as a sheet on substrate 19 so as to cover inorganic intermediate insulating layer 32, TFTs 9, and address lines 5 and 7. organic layer 33 is formed of a photo-imageable material such as Fuji Clear™ or a photo-imageable type of BCB. Substantially transparent layer 33 may also be formed of a ***non-photo-imageable*** *type of BCB*. … (col. 6, lines 59 – 67, emphasis supplied).

Therefore, in view of a distinction admitted by Gu himself, US Patent 6,376,270 does not have Applicants' claimed photosensitive resin/photo-imageable insulating layer.

Since the den Boer parent application and US Patent 6,376,270 (1) do not disclose its "substantially transparent planarization or insulating layer 33" as a photosensitive resin and (2) describe the low dielectric constant of less than or equal to about 3.0 (and consider a dielectric constant of about 3.9 undesirably high (which results in a capacitance that is too high), den Boer will be confined to the April 12, 1996 filing date.

2. APPLICANTS WILL BE ACCORDED EARLIER PRIORITY

In contrast to the den Boer parent application SN 09/470,271 and US Patent 6,376,270 to Gu et al., Applicants' priority documents fully support the Proposed Count and Applicants' reissue claims (including the photosensitivity and claimed dielectric range). Verified translations of Applicants' priority documents JP 7-206367 and JP 7-254043 (MPEP §201.15) have been submitted in reissue application 10/915,717 and have today been supplied for the captioned application as well. The chart on the next page of this document indicates by reference to example paragraph number and example figures

where example support for the Proposed Count resides in Applicants' priority documents JP 7-206367 and JP 7-254043, and thus illustrate a reason why Applicants will prevail.

The Proposed Count	Support in Priority Japanese application No. 7-206367	Support in Priority Japanese application No. 7-254043
A liquid crystal display device comprising:	e.g., paragraphs 0044 and Figure 1	e.g., paragraph 0060 and Figure 1
a substrate;	e.g., paragraph 0047 and Figure 2	e.g., paragraph 0063 and Figure 2
an array of transistors on said substrate;	e.g., paragraph 0047	e.g., paragraph 0063 and Figure 12
a plurality of gate and data lines connected to said transistors;	e.g., paragraph 0045	e.g., paragraph 0061
an array of pixel electrodes on said substrate;	e.g., paragraph 0047	e.g., paragraph 0063
a plurality of pixel electrodes overlapping at least one of the gate and data lines; and	e.g., paragraph 0045 and Figure 1	e.g., paragraph 0061 and Figure 1
a photo-imageable insulating layer on said substrate between said gate and data lines and said pixel electrodes at least in the areas of overlap and areas adjacent pixel electrode-connected electrodes of the transistors,	e.g., paragraphs 0047, 0048, 0052 and 0054 and Figure 2	e.g., paragraphs 0063, 0064, 0068 and 0070 and Figure 2
wherein said photosensitive resin has a dielectric constant less than about 5.0, and a first group of contact vias defined therein by photo-imaging,	paragraph 0055	paragraph 0071
wherein said pixel electrodes are in electrical communication with corresponding transistor source electrodes through corresponding contact vias of said first group that are defined in said insulating layer.	e.g., paragraph 0048	e.g., paragraph 0064

3. APPLICANTS EXPECT TO PROVE AN EARLIER ACTUAL REDUCTION TO PRACTICE, IF NECESSARY

Applicants believe that they would also prove, if necessary, an earlier actual reduction to practice. Detailed explanation of Applicants' actual reduction to practice for the purpose of this Statement Under §41.202(a) is not now deemed necessary in view of Applicants explanation above that they should be accorded Senior Party status and have an earlier constructive reduction to practice than den Boer. Should Applicants be incorrect as to what constitutes sufficient information for this Statement, however, Applicants seek leave to supplement this Statement with information regarding actual reduction to practice.

(5) CLAIM CHART - WRITTEN DESCRIPTION

Applicants have added claims 34 – 60 to provoke an interference. The following charts show examples of written description in Applicants' specification for each new claim. All references to Applicants' specification are to column and line number in the following format: xx:yy, where xx is the column number and yy is the line number.

New Reissue Claim 34	Support in US Patent 6,433,851
A liquid crystal display device comprising	Transmission type liquid crystal display device (1:16+; 3:31+; 7:29+).
A substrate;	Transparent insulating substrate, e.g., substrate 31 shown in Fig. 2.
an array of transistors on said substrate;	Array of TFTs 24 shown in Fig. 12, formation of TFT on substrate 31 described, e.g., beginning at 7:58.
A plurality of gate and data lines connected to said transistors;	TFT 24 acting as switching element is formed at crossing of age line 22 and source line 23; gate electrode of TFT 24 is connected to gate line 22 and source electrode of TFT 24 is connected to source line 23 (*see*, e.g., 7:39-55).
an array of pixel electrodes on said substrate;	Active matrix substrate includes plurality of pixel electrodes 21 arranged in a matrix on substrate 31 (see, e.g., 7:34+).
A plurality of pixel electrodes overlapping at least one of the gate and data lines; and	The peripheries of each pixel electrode 21 overlap the gate lines 22 and the source lines 23 (*see*, e.g., 7:39+).
A photosensitive resin on said substrate between said gate and data lines and said pixel electrodes at least in the areas of overlap and areas adjacent pixel electrode-connected electrodes of the transistors;	An interlayer insulating film 38 is formed covering the TFT 24, the gate line 22, the source line 23, and the connecting electrode 25 (*see*, e.g., 8:12+). A transparent conductive film is formed on the interlayer insulating film 38 to constitute the pixel electrode 21 (*see*, e.g., 8:15+). The interlayer insulating film 38 is formed from a photosensitive acrylic resin, and is exposed to light according to a predetermined pattern and developed with an alkaline solution (*see*, e.g., 8:35+).
wherein said photosensitive resin has a dielectric constant in a range from 3.4 to 3.5,	The acrylic resin constituting the interlayer insulating film 38 has a dielectric constant of 3.4 to 3.8 which is lower than that of an inorganic film (e.g., the dielectric constant of silicon nitride is 8) and a high

	transparency. (*see*, e.g., 8:66+; 15:3; 17:44 – 45).
and a first group of contact vias defined therein by photo-imaging, wherein said pixel electrodes are in electrical communication with corresponding transistor electrodes through corresponding contact vias of said first group that are defined in said photosensitive resin.	The pixel electrode 21 is connected to the drain electrode 36b of the TFT 24 via the contact hole 26 formed through the interlayer insulating film 38 and the transparent conductive film 37a' which is the connecting electrode 25.

New Reissue Claim 35	Support in US Patent 6,433,851
The liquid crystal display device according to claim 34, wherein the photo-imageable insulating layer is planarized adjacent the pixel electrode.	The interlayer insulating film may be formed by applying an organic material such as polyimide to obtain a flat pixel portion (*see*, e.g,. 2:34+, 8:57, 19:7+, and flat interlayer insulating film 38 shown, e.g., in Fig. 2).

New Reissue Claim 36	Support in US Patent 6,433,851
The liquid crystal display device according to claim 34, wherein a pixel aperture ratio is at least about 65%.	For example, for a 10.4" VGA, the aperture ratio increased by about 20 points from 65% to 86%... . For a 12.1" XGA, similarly, the aperture ratio greatly increased from 55% to 80% (*see*, e.g., 22:30+).

New Reissue Claim 37	Support in US Patent 6,433,851
The liquid crystal display device according to claim 34, wherein the pixel electrode overlaps one of the data and gate lines by about 1 μm or more.	The overlap width should be set in consideration of a variation in the actual fabrication process. For example, it is preferably about 1.0 μm or more (*see*, e.g., 13:46+).

New Reissue Claim 38	Support in US Patent 6,433,851
The liquid crystal display device according to claim 34, further comprising a semiconductor layer on top of the gate insulating layer.	A semiconductor layer 34 is formed on the gate insulating film 33 so as to overlap the gate electrode 32… (*see*, e.g., 7:61+).

New Reissue Claim 39	Support in US Patent 6,433,851
The liquid crystal display device according to claim 34, wherein the semiconductor layer includes intrinsic a-S1.	It is inherent from, e.g., 7:58 through 8:14, that the semiconductor layer 34 includes intrinsic a-S1.

New Reissue Claim 40	Support in US Patent 6,433,851
The liquid crystal display device according to claim 34, further comprising a contact layer over the semiconductor layer.	7:58 through 8:14 describe a contact layer over semiconductor layer 34.

New Reissue Claim 41	Support in US Patent 6,433,851
The liquid crystal display device according to claim 34, wherein the contact layer includes amorphous silicon.	It is inherent from, e.g., 7:58 through 8:14, that the contact layer over semiconductor layer 34 includes amorphous silicon.

New Reissue Claim 42	Support in US Patent 6,433,851
The liquid crystal display device according to claim 34, wherein the thickness of the pixel electrodes is no greater than 1500Å.	ITO is deposited on the photosensitive transparent acrylic resin to a thickness of 50 to 150 nm by sputtering and is patterned to form the pixel electrodes 51 (*see*, e.g., 20:64+)

New Reissue Claim 43	Support in US Patent 6,433,851
A liquid crystal display device comprising	Transmission type liquid crystal display device (1:16+; 3:31+; 7:29+).
a substrate;	Transparent insulating substrate, e.g., substrate 31 shown in Fig. 2.
an array of transistors on said substrate;	Array of TFTs 24 shown in Fig. 12, formation of TFT on substrate 31 described, e.g., beginning at 7:58.
a plurality of gate and data lines connected to said transistors;	TFT 24 acting as switching element is formed at crossing of age line 22 and source line 23; gate electrode of TFT 24 is connected to gate line 22 and source electrode of TFT 24 is connected to source line 23 (*see*, e.g., 7:39-55).
an array of pixel electrodes on said substrate;	Active matrix substrate includes plurality of pixel electrodes 21 arranged in a matrix on substrate 31 (see, e.g., 7:34+).
a plurality of pixel electrodes overlapping at least one of the gate and data lines in areas of overlap and in areas adjacent transistor electrodes which are in electrical communication with the pixel electrodes; and	The peripheries of each pixel electrode 21 overlap the gate lines 22 and the source lines 23 (*see*, e.g., 7:39+).

a photo-imageable insulating layer on said substrate between said gate and data lines and said pixel electrodes at least in the areas of overlap;	An interlayer insulating film 38 is formed covering the TFT 24, the gate line 22, the source line 23, and the connecting electrode 25 (*see*, e.g., 8:12+). A transparent conductive film is formed on the interlayer insulating film 38 to constitute the pixel electrode 21 (*see*, e.g., 8:15+). The interlayer insulating film 38 is formed from a photosensitive (photo-imageable) acrylic resin, and is exposed to light according to a predetermined pattern and developed with an alkaline solution (*see*, e.g., 8:35+).
wherein said photosensitive resin has a dielectric constant in a range from about 3.4 to about 3.8,	The acrylic resin constituting the interlayer insulating film 38 has a dielectric constant of 3.4 to 3.8 which is lower than that of an inorganic film (e.g., the dielectric constant of silicon nitride is 8) and a high transparency. (*see*, e.g., 8:66+).
and a first group of contact vias defined therein by photo-imaging, wherein said pixel electrodes are in electrical communication with corresponding transistor electrodes through corresponding contact vias of said first group that are defined in said insulating layer.	The pixel electrode 21 is connected to the drain electrode 36b of the TFT 24 via the contact hole 26 formed through the interlayer insulating film 38 and the transparent conductive film 37a' which is the connecting electrode 25.

New Reissue Claim 44	Support in US Patent 6,433,851
The liquid crystal display device according to claim 43, wherein the photo-imageable insulating layer is planarized adjacent the pixel electrode.	The interlayer insulating film may be formed by applying an organic material such as polyimide to obtain a flat pixel portion (*see*, e.g,. 2:34+, 8:57, 19:7+, and flat interlayer insulating film 38 shown, e.g., in Fig. 2).

New Reissue Claim 45	Support in US Patent 6,433,851
The liquid crystal display device according to claim 43, wherein a pixel aperture ratio is at least about 80%.	For example, for a 10.4" VGA, the aperture ratio increased by about 20 points from 65% to 86%... . For a 12.1" XGA, similarly, the aperture ratio greatly increased from 55% to 80% (*see*, e.g., 22:30+).

New Reissue Claim 46	Support in US Patent 6,433,851
The liquid crystal display device according to claim 43, wherein the pixel electrode overlaps one of the data and gate lines by about 1 μm or more.	The overlap width should be set in consideration of a variation in the actual fabrication process. For example, it is preferably about 1.0 μm or more (*see*, e.g., 13:46+).

New Reissue Claim 47	Support in US Patent 6,433,851
The liquid crystal display device according to claim 43, further comprising a semiconductor layer on top of the gate insulating layer.	A semiconductor layer 34 is formed on the gate insulating film 33 so as to overlap the gate electrode 32… (*see*, e.g., 7:61+).

New Reissue Claim 48	Support in US Patent 6,433,851
The liquid crystal display device according to claim 47, wherein the semiconductor layer includes intrinsic a-S1.	It is inherent from, e.g., 7:58 through 8:14, that the semiconductor layer 34 includes intrinsic a-S1.

New Reissue Claim 49	Support in US Patent 6,433,851
The liquid crystal display device according to claim 47, further comprising a contact layer over the semiconductor layer.	7:58 through 8:14 describe a contact layer over semiconductor layer 34.

New Reissue Claim 50	Support in US Patent 6,433,851
The liquid crystal display device according to claim 49, wherein the contact layer includes amorphous silicon.	It is inherent from, e.g., 7:58 through 8:14, that the contact layer over semiconductor layer 34 includes amorphous silicon.

New Reissue Claim 51	Support in US Patent 6,433,851
The liquid crystal display device according to claim 43, wherein the thickness of the pixel electrodes is no greater than 1500Å.	ITO is deposited on the photosensitive transparent acrylic resin to a thickness of 50 to 150 nm by sputtering and is patterned to form the pixel electrodes 51 (*see*, e.g., 20:64+)

New Reissue Claim 52	Support in US Patent 6,433,851
A method of forming a liquid crystal display device comprising	Transmission type liquid crystal display device (1:16+; 3:31+; 7:29+).
(1) providing, on a substrate: (a) an array of transistors;	Transparent insulating substrate, e.g., substrate 31 shown in Fig. 2. Array of TFTs 24 shown in Fig. 12, formation of TFT on substrate 31 described, e.g., beginning at 7:58.
(b) a plurality of gate and data lines connected to said transistors;	TFT 24 acting as switching element is formed at crossing of age line 22 and source line 23; gate electrode of TFT 24 is connected to gate line 22 and source electrode of TFT 24 is connected to source line 23 (*see*, e.g., 7:39-55).
(2) providing a photo-imageable insulating layer on said substrate over said gate and data lines,	An interlayer insulating film 38 is formed covering the TFT 24, the gate line 22, the source line 23, and the connecting electrode 25 (*see*, e.g., 8:12+). The interlayer insulating film 38 is formed from a photosensitive (photo-imageable) acrylic resin, and is exposed to light according to a predetermined pattern and developed with an alkaline solution (*see*, e.g., 8:35+).
said photo-imageable insulating layer having a dielectric constant in a range from about 3.4 to about 3.8;	The acrylic resin constituting the interlayer insulating film 38 has a dielectric constant of 3.4 to 3.8 which is lower than that of an inorganic film (e.g., the dielectric constant of silicon nitride is 8) and a high transparency. (*see*, e.g., 8:66+).
(3) using photo-imaging of the photo-imageable insulating layer to define a first group of contact vias in the photo-imageable insulating layer;	contact hole 26/56 formed through the interlayer insulating film 68 after exposure of resin to light according to predetermined pattern and developed (e.g., 9:10+, 17:17+);
(4) providing a plurality of pixel electrodes overlapping at least one of the gate and data lines in areas of overlap and in areas adjacent transistor electrodes which are in electrical communication with the pixel electrodes;	Active matrix substrate includes plurality of pixel electrodes 21 arranged in a matrix on substrate 31 (see, e.g., 7:34+). The peripheries of each pixel electrode 21 overlap the gate lines 22 and the source lines 23 (*see*, e.g., 7:39+).
(5) providing electrical communication	The pixel electrode 21 is connected to the

between said pixel electrodes and corresponding transistor electrodes through corresponding contact vias of said first group that are defined in said insulating layer; and	drain electrode 36b of the TFT 24 via the contact hole 26 formed through the interlayer insulating film 38 and the transparent conductive film 37a' which is the connecting electrode 25
wherein the photo-imageable insulating layer is provided between said gate and data lines and the pixel electrodes at least in areas of overlap between said gate and data lines and said pixel electrodes.	An interlayer insulating film 38 is formed covering the TFT 24, the gate line 22, the source line 23, and the connecting electrode 25 (*see*, e.g., 8:12+). The peripheries of each pixel electrode 21 overlap the gate lines 22 and the source lines 23 (*see*, e.g., 7:39+).

New Reissue Claim 53	Support in US Patent 6,433,851
The method according to claim 52, further comprising planarizing the photo-imageable insulating layer adjacent the pixel electrode.	The interlayer insulating film may be formed by applying an organic material such as polyimide to obtain a flat pixel portion (*see*, e.g,. 2:34+, 8:57, 19:7+, and flat interlayer insulating film 38 shown, e.g., in Fig. 2).

New Reissue Claim 54	Support in US Patent 6,433,851
The method according to claim 52, wherein a pixel aperture ratio is at least about 80%.	For example, for a 10.4" VGA, the aperture ratio increased by about 20 points from 65% to 86%... . For a 12.1" XGA, similarly, the aperture ratio greatly increased from 55% to 80% (*see*, e.g., 22:30+).

New Reissue Claim 55	Support in US Patent 6,433,851
The method according to claim 52, wherein the pixel electrode overlaps one of the data and gate lines by about 1.0 μm or more.	The overlap width should be set in consideration of a variation in the actual fabrication process. For example, it is preferably about 1.0 μm or more (*see*, e.g., 13:46+).

New Reissue Claim 56	Support in US Patent 6,433,851
The method according to claim 52, further comprising providing a semiconductor layer on top of the gate insulating layer.	A semiconductor layer 34 is formed on the gate insulating film 33 so as to overlap the gate electrode 32… (*see*, e.g., 7:61+).

New Reissue Claim 57	Support in US Patent 6,433,851
The method according to claim 56, wherein the semiconductor layer includes intrinsic a-S1.	It is inherent from, e.g., 7:58 through 8:14, that the semiconductor layer 34 includes intrinsic a-S1.

New Reissue Claim 58	Support in US Patent 6,433,851
The method according to claim 56, further comprising providing a contact layer over the semiconductor layer.	7:58 through 8:14 describe a contact layer over semiconductor layer 34.

New Reissue Claim 59	Support in US Patent 6,433,851
The method according to claim 58, wherein the contact layer includes amorphous silicon.	It is inherent from, e.g., 7:58 through 8:14, that the contact layer over semiconductor layer 34 includes amorphous silicon.

New Reissue Claim 60	Support in US Patent 6,433,851
The method according to claim 52, wherein the thickness of the pixel electrodes is no greater than 1500Å.	ITO is deposited on the photosensitive transparent acrylic resin to a thickness of 50 to 150 nm by sputtering and is patterned to form the pixel electrodes 51 (*see*, e.g., 20:64+)

(6) CLAIM CHART - CONSTRUCTIVE REDUCTIONS TO PRACTICE

Applicants wish to be accorded benefit of constructive reduction to practices as set forth in their US Patent 6,433,851 and all parent and priority applications claimed thereby.

A chart illustrating Applicants' constructive reductions to practice based on its United States applications is provided in section (5) hereof, which chart is incorporated herein by reference and not explicitly reproduced at this juncture for sake of brevity. Although the chart of section (5) refers to column and line numbers of US Patent 6,433,851, all Applicants' US applications are essentially identical so that the subject matter of the chart of section (5) is applicable to each of Applicants' US applications (it being understood that page and line numbers in the applications differ from the column and line numbers of US Patent 6,433,851, but the subject matter remains the same).

A chart illustrating Applicants' constructive reductions to practice based on its Japanese priority documents JP 7-206367 and JP 7-254043 is provided in section (4) hereof, which chart is incorporated herein by reference and not explicitly reproduced at this juncture for sake of brevity.

Should any aspect of this Statement Under §41.202(a) be found wanting or not in compliance with §41.202(a) or any other applicable regulation or requirement, Applicants request leave and opportunity to amend or supplement this Statement accordingly.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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